

WEST Search History

DATE: Monday, July 18, 2005

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L25	L24 and (independently near5 execut\$)	5
<input type="checkbox"/>	L24	L23 and (run time)	300
<input type="checkbox"/>	L23	L22 and xml	538
<input type="checkbox"/>	L22	L21 and smalltalk	1529
<input type="checkbox"/>	L21	java and c++	10541
<i>DB=EPAB; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L20	EP-1410184-A1.did.	0
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L19	US-6754884-B1.did.	1
<input type="checkbox"/>	L18	US-6754884-B1.did.	1
<i>DB=EPAB; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L17	EP-1410184-A1.did.	0
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L16	L14 and map\$	1
<input type="checkbox"/>	L15	L14 and (run near5 time)	0
<input type="checkbox"/>	L14	(object and structure and xml).ti.	10
<input type="checkbox"/>	L13	L12 and (run near5 time)	4
<input type="checkbox"/>	L12	L11 and xml	25
<input type="checkbox"/>	L11	(independently near5 executable)	446
<input type="checkbox"/>	L10	L9 and (independently near5 executable)	0
<input type="checkbox"/>	L9	(object and orient\$ and language\$1).ti.	318
<input type="checkbox"/>	L8	l6 and (data near5 description)	5
<input type="checkbox"/>	L7	L6 and (independently near5 executable)	0
<input type="checkbox"/>	L6	L5 and xml	47
<input type="checkbox"/>	L5	L4 and (object near5 orient\$)	77
<input type="checkbox"/>	L4	L3 and run\$time	112
<input type="checkbox"/>	L3	L2 and map\$	415
<input type="checkbox"/>	L2	L1 and structure	933
<input type="checkbox"/>	L1	descriptive near5 language\$1	1469

END OF SEARCH HISTORY



[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: The ACM Digital Library The Guide

independently executable xml object oriented descriptive lang

SEARCH

[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used

independently executable xml object oriented descriptive language mapping

Found 73,037 of 157,873

Sort results by

Save results to a Binder

Try an [Advanced Search](#)

Display results

[Search Tips](#)

Try this search in [The ACM Guide](#)

Open results in a new window

Results 1 - 20 of 200

Result page: **1** [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Relevance scale

1 HydroJ: object-oriented pattern matching for evolvable distributed systems

Keunwoo Lee, Anthony LaMarca, Craig Chambers

October 2003 **ACM SIGPLAN Notices , Proceedings of the 18th annual ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications**, Volume 38 Issue 11

Full text available: [pdf\(311.06 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In an evolving software system, components must be able to change independently while remaining compatible with their peers. One obstacle to independent evolution is the *brittle parameter problem*: the ability of two components to communicate can depend on a number of *inessential* details of the types, structure, and/or contents of the values communicated. If these details change, then the components can no longer communicate, even if the *essential* parts of the message remain ...

Keywords: HydroJ, XML, distributed systems, dynamic dispatch, object-oriented programming, pattern matching, semi-structured data, software evolution, ubiquitous computing

2 Language-independent aspect-oriented programming

Donal Lafferty, Vinny Cahill

October 2003 **ACM SIGPLAN Notices , Proceedings of the 18th annual ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications**, Volume 38 Issue 11

Full text available: [pdf\(1.26 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The term aspect-oriented programming (AOP) has come to describe the set of programming mechanisms developed specifically to express crosscutting concerns. Since crosscutting concerns cannot be properly modularized within object-oriented programming, they are expressed as aspects and are composed, or woven, with traditionally encapsulated functionality referred to as components. Many AOP models exist, but their implementations are typically coupled with a single language. To allow weaving of exist ...

Keywords: Weave.NET, aspect-oriented programming, common language infrastructure, language-independence

3 A fine-grained access control system for XML documents

Ernesto Damiani, Sabrina De Capitani di Vimercati, Stefano Paraboschi, Pierangela Samarati
May 2002 **ACM Transactions on Information and System Security (TISSEC)**, Volume 5
Issue 2

Full text available: [!\[\]\(4729e517bc6a7cd81c8025b9646574fb_img.jpg\) pdf\(330.60 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Web-based applications greatly increase information availability and ease of access, which is optimal for public information. The distribution and sharing of information via the Web that must be accessed in a selective way, such as electronic commerce transactions, require the definition and enforcement of security controls, ensuring that information will be accessible only to authorized entities. Different approaches have been proposed that address the problem of protecting information in a Web ...

Keywords: Access control, World Wide Web, XML documents, authorizations specification and enforcement

4 Business-to-business interactions: issues and enabling technologies

B. Medjahed, B. Benatallah, A. Bouguettaya, A. H. H. Ngu, A. K. Elmagarmid
May 2003 **The VLDB Journal — The International Journal on Very Large Data Bases**,
Volume 12 Issue 1

Full text available: [!\[\]\(3e2231b1ad3ca8da8658228c00dd08e0_img.jpg\) pdf\(558.34 KB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

Business-to-Business (B2B) technologies pre-date the Web. They have existed for at least as long as the Internet. B2B applications were among the first to take advantage of advances in computer networking. The Electronic Data Interchange (EDI) business standard is an illustration of such an early adoption of the advances in computer networking. The ubiquity and the affordability of the Web has made it possible for the masses of businesses to automate their B2B interactions. However, several issu ...

Keywords: B2B Interactions, Components, E-commerce, EDI, Web services, Workflows, XML

5 A comprehensive approach for the development of modular software architecture description languages

Eric M. Dashofy, André van der Hoek, Richard N. Taylor
April 2005 **ACM Transactions on Software Engineering and Methodology (TOSEM)**,
Volume 14 Issue 2

Full text available: [!\[\]\(b792654f2cef9719eabeb6c5be00811e_img.jpg\) pdf\(3.51 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Research over the past decade has revealed that modeling software architecture at the level of components and connectors is useful in a growing variety of contexts. This has led to the development of a plethora of notations for representing software architectures, each focusing on different aspects of the systems being modeled. In general, these notations have been developed without regard to reuse or extension. This makes the effort in adapting an existing notation to a new purpose commensurate ...

Keywords: ArchStudio 3, Architecture description languages, XML, xADL 2.0

6 A survey of approaches to automatic schema matching

Erhard Rahm, Philip A. Bernstein
December 2001 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 10 Issue 4

Full text available:  pdf(196.22 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

Schema matching is a basic problem in many database application domains, such as data integration, E-business, data warehousing, and semantic query processing. In current implementations, schema matching is typically performed manually, which has significant limitations. On the other hand, previous research papers have proposed many techniques to achieve a partial automation of the match operation for specific application domains. We present a taxonomy that covers many of these existing approach ...

Keywords: Graph matching, Machine learning, Model management, Schema integration, Schema matching

7 An XML query engine for network-bound data

Zachary G. Ives, A. Y. Halevy, D. S. Weld

December 2002 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 11 Issue 4

Full text available:  pdf(351.86 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

XML has become the lingua franca for data exchange and integration across administrative and enterprise boundaries. Nearly all data providers are adding XML import or export capabilities, and standard XML Schemas and DTDs are being promoted for all types of data sharing. The ubiquity of XML has removed one of the major obstacles to integrating data from widely disparate sources - namely, the heterogeneity of data formats. However, general-purpose integration of data across the wide are a also re ...

Keywords: Data integration, Data streams, Query processing, Web and databases, XML

8 Web-based simulation: SISCO: a supply chain simulation tool utilizing silk™ and XML

Dean C. Chatfield, Terry P. Harrison, Jack C. Hayya

December 2001 **Proceedings of the 33nd conference on Winter simulation**

Full text available:  pdf(276.14 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We discuss SISCO, the Simulator for Integrated Supply Chain Operations, a Java-based tool that simplifies supply chain simulation model development. SISCO maps supply chain descriptions stored in the XML-based Supply Chain Modeling Language (SCML) format to a set of supply chain "building blocks" developed with ThreadTec's Silk™ simulation classes. The resulting system combines the ease of a visual supply chain simulator, the power and flexibility of a full object-oriented programming lang ...

9 Model-driven development of Web applications: the AutoWeb system

Piero Fraternali, Paolo Paolini

October 2000 **ACM Transactions on Information Systems (TOIS)**, Volume 18 Issue 4

Full text available:  pdf(6.94 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper describes a methodology for the development of WWW applications and a tool environment specifically tailored for the methodology. The methodology and the development environment are based upon models and techniques already used in the hypermedia, information systems, and software engineering fields, adapted and blended in an original mix. The foundation of the proposal is the conceptual design of WWW applications, using HDM-lite, a notation for the specification of structure, nav ...

Keywords: HTML, WWW, application, development, intranet, modeling

10 DAOP-ADL: an architecture description language for dynamic component and aspect-based development 

Mónica Pinto, Lidia Fuentes, Jose María Troya

September 2003 **Proceedings of the second international conference on Generative programming and component engineering GPCE '03**

Full text available:  pdf(307.17 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Architecture description languages deal with the description, analysis and reuse of software architectures. This paper describes DAOP-ADL, a component- and aspect-based language to specify the architecture of an application in terms of components, aspects and a set of plug-compatibility rules between them. With the aim of connecting the specification of the application architecture to the implementation, we describe our language using XML and XML Schemas. The DAOP-ADL language was designed to be ...

11 Intriguing technology from OOPSLA: Architecture and design of adaptive object-models 

Joseph W. Yoder, Federico Balaguer, Ralph Johnson

December 2001 **ACM SIGPLAN Notices**, Volume 36 Issue 12

Full text available:  pdf(1.52 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Many object-oriented information systems share an architectural style that emphasizes flexibility and run-time adaptability. Business rules are stored externally to the program such as in a database or XML files instead of in code. The object model that the user cares about is part of the database, and the object model of the code is just an interpreter of the users' object model. We call these systems "Adaptive Object-Models", because the users' object model is interpreted at runtime and can be ...

Keywords: adaptive object-model, adaptive systems, dynamic object-model, meta-architectures, metadata, patterns, reflection, reflective systems meta-modeling

12 UnQL: a query language and algebra for semistructured data based on structural recursion 

Peter Buneman, Mary Fernandez, Dan Suciu

March 2000 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 9 Issue 1

Full text available:  pdf(414.32 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

This paper presents structural recursion as the basis of the syntax and semantics of query languages for semistructured data and XML. We describe a simple and powerful query language based on pattern matching and show that it can be expressed using structural recursion, which is introduced as a top-down, recursive function, similar to the way XSL is defined on XML trees. On cyclic data, structural recursion can be defined in two equivalent ways: as a recursive function which evaluates the data t ...

Keywords: Optimization, Query language, Semistructured data, Structural recursion, XML, XSL

13 Building E-commerce applications from object-oriented conceptual models 

Oscar Pastor, Silvia Abrahão, Joan Fons

March 2001 **ACM SIGecom Exchanges**, Volume 2 Issue 2

Full text available:  pdf(84.13 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper introduces an extension to UML that takes care of web page navigation using the OO-Method, dynamic prototyping, and a new way of specifying the navigation design. Furthermore, a software production process for e-commerce applications design is described. This process is driven by an Object-Oriented Web-Solutions Modeling approach (OOWS), which provides mechanisms to deal with the development of web-based applications. In the proposed process, a system is completely specified using obj ...

Keywords: conceptual modeling, e-commerce, object-oriented

14 Extending Java for high-level Web service construction

Aske Simon Christensen, Anders Møller, Michael I. Schwartzbach

November 2003 **ACM Transactions on Programming Languages and Systems (TOPLAS)**,

Volume 25 Issue 6

Full text available:  [pdf\(947.02 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We incorporate innovations from the <bigwig> project into the Java language to provide high-level features for Web service programming. The resulting language, JWIG, contains an advanced session model and a flexible mechanism for dynamic construction of XML documents, in particular XHTML. To support program development we provide a suite of program analyses that at compile time verify for a given program that no runtime errors can occur while building documents or receiving form input, and ...

Keywords: Interactive Web services, XML, data-flow analysis

15 Service design and modeling: Methodological support for service-oriented design with ISDL

Dick Quartel, Remco Dijkman, Marten van Sinderen

November 2004 **Proceedings of the 2nd international conference on Service oriented computing**

Full text available:  [pdf\(296.25 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Currently, service-oriented computing is mainly technology-driven. Most developments focus on the technology that enables enterprises to describe, publish and compose application services, and to communicate with applications of other enterprises according to their service descriptions. In this paper, we argue that this technology should be complemented with modelling languages, design methods and techniques supporting <i>service-oriented design</i>. We consider service-oriented design ...

Keywords: ISDL, service, service-oriented computing, service-oriented design

16 DDD papers: Software factories: assembling applications with patterns, models, frameworks and tools

Jack Greenfield, Keith Short

October 2003 **Companion of the 18th annual ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications**

Full text available:  [pdf\(707.51 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The confluence of component based development, model driven development and software product lines forms an approach to application development based on the concept of software factories. This approach promises greater gains in productivity and predictability than those produced by incremental improvements to the current paradigm of object orientation, which have not kept pace with innovation in platform technology. Software

factories promise to make application assembly more cost effective thro ...

Keywords: design patterns, domain-specific languages, model-driven development, software factories, software product lines

17 Rendering: An XML-based visual shading language for vertex and fragment shaders 

Frank Goetz, Ralf Borau, Gitta Domik

April 2004 **Proceedings of the ninth international conference on 3D Web technology**

Full text available:  pdf(570.33 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper presents a new system for the visual development of complex vertex and fragment shaders. The system makes usage of the advantages of visual programming languages. The core of the system is a Java program. With this program users can develop and test dataflow diagrams that describe the functionality of OpenGL ARB vertex and fragment programs. To get a graphical feedback the system is able to display rendered and shaded scenes immediately. The rendering of these three dimensional scenes ...

Keywords: Extensible 3D (X3D), Extensible Markup Language (XML), dataflow programming, fragment shader, shading languages, vertex shader, visual programming

18 XML query and programming languages: XJ: facilitating XML processing in Java 

Matthew Harren, Mukund Raghavachari, Oded Shmueli, Michael G. Burke, Rajesh Bordawekar, Igor Pechtchanski, Vivek Sarkar

May 2005 **Proceedings of the 14th international conference on World Wide Web**

Full text available:  pdf(293.50 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The increased importance of XML as a data representation format has led to several proposals for facilitating the development of applications that operate on XML data. These proposals range from runtime API-based interfaces to XML-based programming languages. The subject of this paper is XJ, a research language that proposes novel mechanisms for the integration of XML as a first-class construct into Java™. The design goals of XJ distinguish it from past work on integrating XML support into ...

Keywords: Java, XML, language design

19 Session 2: secure Web services: Designing a distributed access control processor for network services on the Web 

Reiner Kraft

November 2002 **Proceedings of the 2002 ACM workshop on XML security**

Full text available:  pdf(301.14 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The service oriented architecture (SOA) is gaining more momentum with the advent of network services on the Web. A programmable and machine accessible Web is the vision of many, and might represent a step towards the semantic Web. However, security is a crucial requirement for the serious usage and adoption of the Web services technology. This paper enumerates design goals for an access control model for Web services. It then introduces an abstract general model for Web services components, along ...

Keywords: Web services, XML, access control, security

20 Web application design: Building adaptable and reusable XML applications with model transformations 

Ivan Kurtev, Klaas van den Berg

May 2005 **Proceedings of the 14th international conference on World Wide Web**

Full text available: [!\[\]\(3d8c13c92b853674f749aac6fa869926_img.jpg\) pdf\(194.71 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We present an approach in which the semantics of an XML language is defined by means of a transformation from an XML document model (an XML schema) to an application specific model. The application specific model implements the intended behavior of documents written in the language. A transformation is specified in a model transformation language used in the Model Driven Architecture (MDA) approach for software development. Our approach provides a better separation of three concerns found in XML ...

Keywords: MDA, XML, XML processing, model transformations, transformation language

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads: [!\[\]\(e1c624d4757f08486e89482c18364c17_img.jpg\) Adobe Acrobat](#) [!\[\]\(fd44bd93e945cfa8875a8962f08e5b64_img.jpg\) QuickTime](#) [!\[\]\(4a7bd0d19449e9ae6d04f317c9f2938f_img.jpg\) Windows Media Player](#) [!\[\]\(ef6fa3bceaf16b53f35cbadeb628a42d_img.jpg\) Real Player](#)

 **PORTAL**
USPTO

Subscribe (Full Service) Register (Limited Service, Free) Login
 Search: The ACM Digital Library The Guide
 object oriented descriptive language mapping

 Feedback Report a problem Satisfaction survey

Terms used object oriented descriptive language mapping

Found 86,497 of 157,873

Sort results by Save results to a Binder
 Display results Search Tips
 Open results in a new window

Try an Advanced Search
 Try this search in The ACM Guide

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Relevance scale 

1 Ada 95 as implementation language for object-oriented designs

Stéphane Barbey

November 1995 **Proceedings of the conference on TRI-Ada '95: Ada's role in global markets: solutions for a changing complex world**

Full text available:  pdf(1.61 MB) Additional Information: [full citation](#), [references](#), [citations](#)



Keywords: Ada 95, Fusion, associations, genericity, mixins, object-oriented programming, object-oriented software development

2 An efficient implementation of SELF a dynamically-typed object-oriented language based on prototypes

C. Chambers, D. Ungar, E. Lee

September 1989 **ACM SIGPLAN Notices , Conference proceedings on Object-oriented programming systems, languages and applications**, Volume 24 Issue 10

Full text available:  pdf(2.41 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)



We have developed and implemented techniques that double the performance of dynamically-typed object-oriented languages. Our SELF implementation runs twice as fast as the fastest Smalltalk implementation, despite SELF's lack of classes and explicit variables. To compensate for the absence of classes, our system uses implementation-level maps to transparently group objects cloned from the same prototype, providing data type information and eliminating the apparent ...

3 Relations as semantic constructs in an object-oriented language

James Rumbaugh

December 1987 **ACM SIGPLAN Notices , Conference proceedings on Object-oriented programming systems, languages and applications**, Volume 22 Issue 12

Full text available:  pdf(1.82 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)



The relation as a semantic construct in an object-oriented language clearly expresses associations and constraints among objects which would otherwise be buried in implementation code. The externalization of references between objects permits a symmetric, non-redundant conceptual model which merits its own special notation and predefined operations. The object-relation model, which combines the object-oriented

model with the entity-relationship model from data base theory, is particularly u ...

4 Description logics for semantic query optimization in object-oriented database systems 

Domenico Beneventano, Sonia Bergamaschi, Claudio Sartori

March 2003 **ACM Transactions on Database Systems (TODS)**, Volume 28 Issue 1

Full text available:  pdf(406.56 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Semantic query optimization uses semantic knowledge (i.e., integrity constraints) to transform a query into an equivalent one that may be answered more efficiently. This article proposes a general method for semantic query optimization in the framework of Object-Oriented Database Systems. The method is effective for a large class of queries, including conjunctive recursive queries expressed with regular path expressions and is based on three ingredients. The first is a Description Logic, ODL

Keywords: Semantic query optimization, description logics, integrity constraints rules, query rewriting method, semantic expansion of a query, subsumption

5 A functional layer for description logics: knowledge representation meets object-oriented programming 

Ralf Möller

October 1996 **ACM SIGPLAN Notices , Proceedings of the 11th ACM SIGPLAN conference on Object-oriented programming, systems, languages, and applications**, Volume 31 Issue 10

Full text available:  pdf(1.83 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The paper motivates the facilities provided by Description Logics in an object-oriented programming scenario. It presents a unification approach of Description Logics and object-oriented programming that allows both views to be conveniently used for different subproblems in a modern software-engineering environment. The main thesis of this paper is that in order to use Description Logics in practical applications, a seamless integration with object-oriented system development methodologies must ...

6 The 3DIS: an extensible object-oriented information management environment 

Hamideh Afsarmanesh, Dennis McLeod

October 1989 **ACM Transactions on Information Systems (TOIS)**, Volume 7 Issue 4

Full text available:  pdf(2.79 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

The 3-Dimensional Information Space (3DIS) is an extensible object-oriented framework for information management. It is specifically oriented toward supporting the database requirements for data-intensive information system applications in which (1) information objects of various levels of abstraction and modalities must be accommodated, (2) descriptive and structural information (metadata) is rich and dynamic, and (3) users who are not database experts must be able to design, manipulate, a ...

7 Special system-oriented section: the best of SIGMOD '94: QuickStore: a high performance mapped object store 

Seth J. White, David J. DeWitt

October 1995 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 4 Issue 4

Full text available:  pdf(2.58 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

QuickStore is a memory-mapped storage system for persistent C++, built on top of the EXODUS Storage Manager. QuickStore provides fast access to in-memory objects by allowing application programs to access objects via normal virtual memory pointers. This article presents the results of a detailed performance study using the OO7 benchmark. The study compares the performance of QuickStore with the latest implementation of the E

programming language. The QuickStore and E systems exemplify the two ba ...

Keywords: benchmark, client-server, memory-mapped, object-oriented, performance, pointer swizzling

8 TROLL: a language for object-oriented specification of information systems

Ralf Jungclaus, Gunter Saake, Thorsten Hartmann, Cristina Sernadas

April 1996 **ACM Transactions on Information Systems (TOIS)**, Volume 14 Issue 2

Full text available:  pdf(2.47 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

TROLL is a language particularly suited for the early stages of information system development, when the universe of discourse must be described. In TROLL the descriptions of the static and dynamic aspects of entities are integrated into object descriptions. Sublanguages for data terms, for first-order and temporal assertions, and for processes, are used to describe respectively the static properties, the behavior, and the evolution over time of objects. TROLL organizes system design through ...

9 Object orientation in multidatabase systems

Evaggelia Pitoura, Omran Bukhres, Ahmed Elmagarmid

June 1995 **ACM Computing Surveys (CSUR)**, Volume 27 Issue 2

Full text available:  pdf(4.85 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

A multidatabase system (MDBS) is a confederation of preexisting distributed, heterogeneous, and autonomous database systems. There has been a recent proliferation of research suggesting the application of object-oriented techniques to facilitate the complex task of designing and implementing MDBSs. Although this approach seems promising, the lack of a general framework impedes any further development. The goal of this paper is to provide a concrete analysis and categorization of the various ...

Keywords: distributed objects, federated databases, integration, multidatabases, views

10 The model, language, and implementation of an object-oriented multimedia knowledge base management system

Hiroshi Ishikawa, Fumio Suzuki, Fumihiko Kozakura, Akifumi Makinouchi, Mika Miyagishima, Yoshio Izumida, Masaaki Aoshima, Yasuo Yamane

March 1993 **ACM Transactions on Database Systems (TODS)**, Volume 18 Issue 1

Full text available:  pdf(3.23 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

New applications such as CAD, AI, and hypermedia require direct representation and flexible use of complex objects, behavioral knowledge, and multimedia data. To this end, we have devised a knowledge base management system called Jasmine. An object-oriented approach in a programming language also seems promising for use in Jasmine. Jasmine extends the current object-oriented approach and provides the following features. Our object model is based on functional data models and well-established ...

11 Objects as closures: abstract semantics of object-oriented languages

Uday Reddy

January 1988 **Proceedings of the 1988 ACM conference on LISP and functional programming**

Full text available:  pdf(951.64 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We discuss denotational semantics of object-oriented languages, using the concept of closure widely used in (semi) functional programming to encapsulate side effects. It is shown that this denotational framework is adequate to explain classes, instantiation, and inheritance in the style of Simula as well as SMALLTALK-80. This framework is then compared with that of Kamin, in his recent denotational definition of SMALLTALK-80, and the implications of the differences between ...

12 An analysis of XML database solutions for the management of MPEG-7 media descriptions

Utz Westermann, Wolfgang Klas

December 2003 **ACM Computing Surveys (CSUR)**, Volume 35 Issue 4

Full text available: [!\[\]\(341b5bdc31177a6c7da7dc713da0d169_img.jpg\) pdf\(448.76 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#), [review](#)

MPEG-7 constitutes a promising standard for the description of multimedia content. It can be expected that a lot of applications based on MPEG-7 media descriptions will be set up in the near future. Therefore, means for the adequate management of large amounts of MPEG-7-compliant media descriptions are certainly desirable. Essentially, MPEG-7 media descriptions are XML documents following media description schemes defined with a variant of XML Schema. Thus, it is reasonable to investigate current ...

Keywords: MPEG-7, XML database systems, multimedia databases

13 Understanding object-oriented: a unifying paradigm

Tim Korson, John D. McGregor

September 1990 **Communications of the ACM**, Volume 33 Issue 9

Full text available: [!\[\]\(0df0bdc1e09cbc2587d9dd4511cb0c27_img.jpg\) pdf\(2.30 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

The need to develop and maintain large complex software systems in a competitive and dynamic environment has driven interest in new approaches to software design and development. The problems with the classical waterfall model have been cataloged in almost every software engineering text [19,23]. In response, alternative models such as the spiral [2], and fountain [9] have been proposed. Problems with traditional development using the classical life cycle include no iteration, no ...

14 Logical foundations of object-oriented and frame-based languages

Michael Kifer, Georg Lausen, James Wu

July 1995 **Journal of the ACM (JACM)**, Volume 42 Issue 4

Full text available: [!\[\]\(9dba7f2ab1cf56a0f0ce568aba9a03d3_img.jpg\) pdf\(7.52 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

We propose a novel formalism, called Frame Logic (abbr., F-logic), that accounts in a clean and declarative fashion for most of the structural aspects of object-oriented and frame-based languages. These features include object identity, complex objects, inheritance, polymorphic types, query methods, encapsulation, and others. In a sense, F-logic stands in the same relationship to the object-oriented paradigm as classical predicate calculus stands to relational programming. ...

Keywords: deductive databases, frame-based languages, logic programming, nonmonotonic inheritance, object-oriented programming, proof theory, semantics, typing

15 Concepts and paradigms of object-oriented programming

Peter Wegner

August 1990 **ACM SIGPLAN OOPS Messenger**, Volume 1 Issue 1

Full text available:  pdf(5.52 MB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

We address the following questions for object-oriented programming: *What is it? What are its goals? What are its origins? What are its paradigms? What are its design alternatives? What are its models of concurrency? What are its formal computational models? What comes after object-oriented programming?* Starting from software engineering goals, we examine the origins and paradigms of object-oriented programming, explore its language design alternatives ...

16 OBSERV—a prototyping language and environment 

Shmuel Tyszberowicz, Amiram Yehudai

July 1992 **ACM Transactions on Software Engineering and Methodology (TOSEM)**,

Volume 1 Issue 3

Full text available:  pdf(2.64 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

The OBSERV methodology for software development is based on rapid construction of an executable specification, or prototype, of a system, which may be examined and modified repeatedly to achieve the desired functionality. The objectives of OBSERV also include facilitating a smooth transition to a target system, and providing means for reusing specification, design, and code of systems and subsystems. We are particularly interested in handling embedded systems, which are likely to have conc ...

Keywords: CRUISE, OBSERV, browsers, concurrency, embedded systems, graphical user interface, interactive programming environments, logic programming, modeling with finite state machines, object-oriented approach, real time systems, simulator, software reuse, static checker

17 Experiences in DBMS implementation using an object-oriented persistent programming language and a database toolkit 

Eric N. Hanson, Tina M. Harvey, Mark A. Roth

November 1991 **ACM SIGPLAN Notices , Conference proceedings on Object-oriented programming systems, languages, and applications**, Volume 26 Issue 11

Full text available:  pdf(1.81 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

18 ADAM: a language-independent, object-oriented, design environment for modeling inheritance and relationship variants in Ada 95, C++, and Eiffel 

D. Needham, S. Demurjian, K. El Guemhioui, T. Peters, P. Zamani, M. McMahon, H. Ellis
December 1996 **Proceedings of the conference on TRI-Ada '96: disciplined software development with Ada**

Full text available:  pdf(1.45 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

19 Object-oriented state machines: subclassing, composition, delegation, and genericity 

Aamod Sane, Roy Campbell

October 1995 **ACM SIGPLAN Notices , Proceedings of the tenth annual conference on Object-oriented programming systems, languages, and applications**, Volume 30 Issue 10

Full text available:  pdf(1.59 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Software specification and implementation techniques based on state machines simplify

design, coding, and validation. However, large systems require complex state machines. Incremental construction techniques can control this complexity. In this paper, we present a construction technique that permits derivation of complex state machines from simpler state machines. The technique uses subclassing, composition, delegation, and genericity to incrementally modify and combine simpler machines. In addi ...

20 Highly efficient and encapsulated re-use of synchronization code in concurrent object-oriented languages 

Satoshi Matsuoka, Kenjiro Taura, Akinori Yonezawa

October 1993 **ACM SIGPLAN Notices , Proceedings of the eighth annual conference on Object-oriented programming systems, languages, and applications,**

Volume 28 Issue 10

Full text available:  [pdf\(2.45 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2005 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)